# NJDOT Bureau of Research QUARTERLY PROGRESS REPORT

Project Title:	Identification of Traffic Control Devices for Mobile and Short			
	Duration Work Operations			
RFP NUMBER:		NJDOT RESEARCH PROJECT MANAGER:		
Project 2003-27		Ed Kondrath		
TASK ORDER NUMBER::		PRINCIPAL INVESTIGATOR:		
RFCUNY 23-01		Robert E. Paaswell, Ph.D.		
Project Starting Date: 01/01/04		Period Starting Date: 07/01/04		
<b>Original</b> Project Ending Date: 12/31/04		Period Ending Date: 09/30/04		
<b>Modified Completion Date:</b>				

Task	% of Total	% of Task	% of Task	% of Total
		this	to date	Complete
		quarter		
Literature Search	25%	100%	100%	25%
Task 1: Develop methodology and	12%	100%	100%	12%
criteria for evaluating devices				
Task 2: Analyze NJDOT practices	8%	100%	100%	8%
for work zone operations				
Task 3: Identify guidelines to	5%	50%	100%	5%
eliminate driver inattentiveness				
Task 4: Identify alternative	8%	50%	50%	4%
techniques for traffic control				
Task 5: Prepare guidelines	8%	25%	25%	2%
Final Report and Implementation	34%	10%	10%	3.4%
TOTAL	100%			60%

## **Project Objectives:**

The overall objective of this research project is to study mobile work zone safety with particular attention to the identification of work zone safety devices, information systems for the reduction of safety and congestion, and implementation of innovative techniques to reduce delays and crashes due to work zones. The specific objectives are to:

- Provide improvements for maximum protection of the motoring public and workers in the work zone and in the set up of the work zone,
- Identify state-of-the art work zone technologies to improve worker safety in mobile work zone and short term maintenance operations,
- Identify information systems for work zone traffic control to reduce delays and crashes,
- Meet the current standards established by internal policies of the NJDOT,
- Identify "best practices" for the use of law enforcement to improve work zone safety,
- Identify key issues to be considered from public outreach and information systems.

#### Project Abstract:

This research will include the identification of potential technologies and information systems, evaluation of the identified devices and systems with appropriate maintenance yards and crews, and the parathion of specifications and Baseline Document Change papers for adoption by the NJDOT. Potential technologies and information systems will be identified from the NJDOT New Technologies and Products database of approved and under evaluation products, Transportation Research Board and National Cooperative Highway Research Program reports, international sources, Strategic Highway Research Program reports, other State DOT correspondence, and manufacturers and vendors. The identified technologies and information systems will be researched to obtain users and technical information on their effectiveness

#### 1. Progress this quarter by task:

The research team met with the NJDOT engineers and Rod Roberson of Rutgers University to discuss the development of the New SHRP equipment, and the demonstration of this equipment in New Jersey. Rutgers is preparing a proposal to present information about this equipment to the engineers for the purpose of funding a complete demonstration. The NJDOT elected to proceed with the demonstration of SHRP in place of the field evaluation of other safety equipment.

- 2. Proposed activities for next quarter by task:
  - Rutgers University will prepare a presentation and demonstration of the new SHRP equipment.
  - The final report will be prepared to document the previous tasks, purchasing procedures for NJDOT equipment, and recommendation for implementation of safety equipment on NJDOT mobile and short duration work zones.
  - A presentation will be prepared to document the study and present the result aand finding to the NJDOT.
- 3. List of deliverables provided in this quarter by task (product date)

Rutgers University will present a proposal to present and demonstrate new SHRP equipment.

## 4. Progress on Implementation and Training Activities

NA

### 5. Problems/Proposed Solutions

None

Total Project Budget	\$72,294
<b>Modified Contract Amount:</b>	
Total Project Expenditure to date	\$43,376.00
% of Total Project Budget Expended	60%